

# **Peak Suppression Of Multi-Carrier Signal With Different Modulation**

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## **Abstract:**

A technique for peak suppression, phase and amplitude equalizer of multi-carrier signals with different modulation is described. The input to the multi-carrier power amplifier is modified by a peak suppression, phase and amplitude equalizer circuit prior to being applied to the amplifier. The peak suppression is applied to a multi-carrier signal with different modulations and bandwidth. After peak suppression each individual carrier is phase and amplitude equalized to maintain the properties of the multi-carrier signal. The phase equalizer maintain the timing property of the carriers and the amplitude equalizer maintain the modulation accuracy of the individual carriers. The input to the peak-to-average reduction circuit could be a baseband, an intermediate frequency ( IF ) or radio frequency ( RF ) signal. The peak-to-average reduction is performed in digital domain.